

REMARKS

The Office Action of January 16, 2004 has been received and its contents carefully noted. In response, the application is being amended in the manner summarized below.

The present Amendment corrects inadvertent informalities in the specification and in two of the claims. It also adds new claims 5-11 to further protect the invention. Claims 6 and 7 depend from original claims 1 and 3, respectively, and provide generally that the pattern exposure system focuses the geometrical figure on an image plane that is approximately parallel to the top surface of the wafer. Claim 7 is a new independent claim, and the rest of the new claims depend from claim 7.

The Office Action rejects the original claims for obviousness on the basis of patent 5,693,439 to Tanaka et al (hereafter simply "Tanaka"). This reference is directed to a technique for positioning a photosensitive substrate with respect to the image plane of an optical projection system, using what the reference characterizes as an oblique incident focusing system. Tanaka projects two intersecting slit images ST1 and ST2 (see Figure 2 of the reference) that are rectangular in shape.

Independent claim 1 includes a "subjecting" step which recites "... using a mask patterned with a geometrical figure comprising a plurality of small rectangles, each narrower in width than a resolution limit of a pattern exposure system, provided on four sides of a large rectangle, and arranged so as to be perpendicular longitudinally or parallel transversely to the respective four sides of the large rectangle." Independent claim 3 has a similar limitation. The Tanaka reference neither discloses nor suggests the use of such a mask while exposing a resist layer to light. [Independent claim 3 has a

similar limitation.] Accordingly, it is respectfully submitted that the Tanaka reference neither anticipates claims 1 and 3 nor renders them obvious.

New independent claim 7 includes a “placing” step which refers to a mask patterned with a predetermined figure, “the predetermined figure including a plurality of elongated light-transmitting regions each having a width that is narrower than the resolution limit of the pattern exposure system.” Tanaka uses a slit plate 101, but an ordinarily skilled person would have had no reason to suspect that Tanaka’s slit is narrower than the resolution limit of Tanaka’s patterned exposure system.

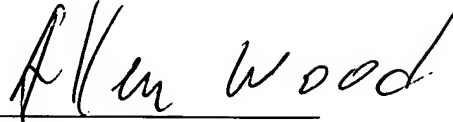
Additionally, independent claim 7 recites the step of “positioning the wafer ... so that the optical axis of the focusing means was substantially perpendicular to the semiconductor wafer and the image plane is located below the resist.” This is not suggested by the reference, either. Even ignoring the location of Tanaka’s image plane, it is clear that Tanaka’s use of an oblique incident focusing system is inconsistent with claim 7.

Since the remaining claims depend from the independent claims that have been discussed above and recite additional limitations to further define the invention, they are patentable along with their independent claims and need not be further discussed.

It is noted that an Information Disclosure Statement was filed on March 11, 2004. It is respectfully requested that the references identified in the Information Disclosure Statement be considered before the present application is allowed.

Reconsideration of this application is respectfully requested in view of the foregoing.

Respectfully submitted,

A handwritten signature in cursive script that reads "Allen Wood". The signature is written in dark ink and is positioned above a horizontal line.

Allen Wood
Registration No. 28,134
Customer No. 23995
(202) 371-8976
(202) 408-0924 (facsimile)

AW:rw